

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

THE CITY OF PHILADELPHIA, et al.

Plaintiffs,

v.

BANK OF AMERICA CORPORATION, et
al.

Defendants.

Case No. 19-cv-1608 (JMF)

**PLAINTIFFS' MEMORANDUM OF LAW IN SUPPORT OF THEIR MOTION FOR
CLASS CERTIFICATION AND APPOINTMENT OF CLASS COUNSEL**

~~FILED UNDER SEAL~~

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INTRODUCTION

This case involves a conspiracy by Defendants to inflate the interest rates for Variable Rate Demand Obligations (“VRDOs”), bonds issued by public entities to raise funds for crucial infrastructure and public services. The interest rates public entities pay on these primarily tax-exempt bonds are reset on a periodic basis, allowing issuers to obtain long-term financing at short-term interest rates. Plaintiffs the City of Philadelphia, the Mayor and City Council of Baltimore, the Board of Directors of the San Diego Association of Governments, Acting as the San Diego County Regional Transportation Commission (“SANDAG”), and other members of the proposed class hired Defendants as remarketing agents (“RMAs”) and paid them hundreds of millions of dollars in fees to reset the bonds’ interest rates at the lowest possible rate to permit trading at par. But instead of fulfilling that responsibility and competing against each other for class members’ remarketing business, Defendants colluded to inflate VRDO rates for their own profit and to the detriment of issuers such as Plaintiffs.

Plaintiffs allege two claims for relief based on Defendants’ conspiracy to raise VRDO interest rates: price-fixing in violation of the Sherman Act, and breach of contract. Plaintiffs now seek class certification because the issues of fact and law raised by their claims are common to all class members. For Plaintiffs’ Sherman Act claim, the ultimate merits question will be whether Defendants conspired to artificially inflate interest rates for the VRDOs they were retained to service. As this and other courts have consistently found in price-fixing cases, that question turns on proof common to the class. Plaintiffs’ state-law breach-of-contract claims will likewise focus on Defendants’ conduct. These claims are based on written contracts in which Defendants made the same two promises to all class members: (1) to set VRDO rates at the lowest possible rates that would permit the bonds to trade at par; and (2) to use their best efforts to remarket VRDOs. By

acting in their own interests to artificially inflate rates, Defendants deprived all class members of the benefits they were entitled to under the contracts.

In order to prove that all class members were harmed by Defendants' conspiracy, and that damages can be estimated on a class-wide basis, Plaintiffs have retained two leading economists: Professor William Schwert,¹ Distinguished Professor of Finance and Statistics Emeritus at the University of Rochester and Dr. Rosa M. Abrantes-Metz,² a former senior competition policy advisor to the World Bank and former Federal Trade Commission economist. As set forth in their reports, both experts have conducted a series of well-accepted economic tests that all lead to the same conclusion: Defendants' conspiracy harmed all or virtually all class members. Professor Schwert concludes that Defendants' conspiracy had class-wide impact based on the results of regression models that isolate the effect of the conspiracy on VRDO rates. Dr. Abrantes-Metz reaches the same conclusion from her structural analysis of the market for VRDO remarketing services and her rate study. Moreover, Professor Schwert's models can also be used to quantify class-wide damages, and they indicate aggregate class-wide damages in the billions of dollars.

There is little doubt that this case meets Rule 23(b)(3)'s requirement that "questions of law or fact common to class members predominate over any questions affecting only individual members." Plaintiffs respectfully submit that they have satisfied their burden under Rule 23(b)(3) and request that the Court certify the following class (the "Class"):

¹ Ex. 1 to Decl. of Elizabeth Aronson in Support of Plaintiffs' Motion for Class Certification (Expert Report of William Schwert ("Schwert Rpt."), Oct. 27, 2022). References to "Ex." in this memorandum correspond to exhibits to the Aronson Declaration.

² Ex. 2 (Expert Report of Dr. Rosa Abrantes-Metz ("Abrantes-Metz Rpt."), Oct. 27, 2022).

All persons and entities who directly paid interest expenses on VRDOs that had interest rates reset on a weekly or daily basis pursuant to remarketing agreements with Defendants at any point from February 1, 2008 through November 30, 2015 (the “Class Period”). Excluded from the Class are Defendants and their employees, affiliates, parents, subsidiaries, and co-conspirators, and the United States government.

Plaintiffs further request that the Court certify the following sub-class (the “Contract Sub-Class”) under Rule 23(b)(3):

All persons and entities who were party to a remarketing agreement with any Counterparty Defendant³ that applies to VRDOs that had interest rates reset on a weekly or daily basis at any point from February 1, 2008 through November 30, 2015 (the “Class Period”). Excluded from the Contract Sub-Class are Defendants and their employees, affiliates, parents, subsidiaries, and co-conspirators, and the United States government.

Plaintiffs also request that the Court appoint Quinn Emanuel Urquhart & Sullivan, LLP, Wollmuth Maher & Deutsch LLP, and Susman Godfrey LLP as Co-lead Class and Sub-Class Counsel pursuant to Rule 23(g).

FACTUAL BACKGROUND

Plaintiffs begin by summarizing just some of the abundant evidence of Defendants’ conspiracy—in the form of emails, chats, deposition admissions, and transactional data—that Plaintiffs developed during discovery. As discussed below, *all* of this evidence is common to the Class and goes to the common issue of liability.

³ “Counterparty Defendant” is defined as any of the following: Banc of America Securities LLC; Barclays Capital, Inc.; Citigroup Global Markets Inc.; Goldman Sachs & Co. LLC; J.P. Morgan Securities LLC; Merrill Lynch, Pierce, Fenner & Smith Inc.; RBC Capital Markets LLC; Wachovia Bank N.A.; or Wells Fargo Bank, N.A.

A. Common Evidence Will Show that the VRDO Market Was Susceptible to Price Fixing

VRDOs are typically issued by municipalities and other public entities such as schools and community organizations to raise funds for operating expenses, infrastructure projects, and public services. Primarily long-term tax-exempt bonds, VRDOs' interest rates are periodically (most often weekly or daily) reset. To attract investors, VRDOs include a built-in "put" feature giving investors an option to redeem the bond on any periodic reset date for its full face value ("par") plus any accrued interest. This combination of features enables VRDO issuers to access long-term debt at short-term interest rates and provides investors with a highly liquid investment opportunity. *See Abrantes-Metz Rpt. ¶ 25.*

To manage the bonds, VRDO issuers contracted with Defendants to act as RMAs pursuant to remarketing agreements. Those agreements imposed on Defendants the same two primary remarketing obligations: to (1) reset the VRDO interest rates at the lowest possible rate that permits the bonds to trade at par, and (2) use their best efforts to remarket VRDOs put back by investors. In exchange for these services, Plaintiffs paid fees to Defendants, which were calculated as a percentage of the VRDOs' outstanding principal amount.

Common evidence will show that during the Class Period, Defendants were the major players in the market for remarketing services, collectively serving as RMAs for more than 70% of the VRDO market during the Class Period. *Abrantes-Metz Rpt. ¶ 63.* As competitors, Defendants marketed themselves to Plaintiffs and other issuers as the banks best able to fulfill the RMA's responsibilities and achieve the lowest cost of borrowing. For example, in response to a Request for Proposal from SANDAG, Bank of America asserted that its remarketing desk had "distinguish[ed] itself" during the financial crisis, highlighted its "remarketing efforts and strong pricing versus competitors," and claimed that its "distribution network, proven marketing

strategies and willingness to commit capital . . . have translated into competitive variable rate pricing for our issuer clients.”⁴ Similarly, a Citi deck prepared for the City and County of San Francisco boasted that “Citi has developed a disciplined and analytical rate resetting process which allows for competitive management of its remarketing book and ultimately results in a skew toward tighter spreads for the benefit of the issuer.”⁵ And as Barclays put it to a potential client:

At the end of the day, the short-term business is all about the rates you are able to achieve for your clients. Every extra basis point your remarketing agent is able to squeeze out of the market relates to real dollars. The short-term desk at Barclays Capital understands and respects this fact and our strong belief in the superior nature of our current platform is staked on the results we are able to produce for our clients.⁶

Beginning as early as 2008, however, Defendants conspired *not* to compete against each other in the market for remarketing services and instead conspired to inflate the interest rates that VRDO issuers paid to investors. Class-wide evidence will show that Defendants accomplished this primarily by coordinating on the proprietary “base rates” they used as the “starting point” to set their VRDO rates.⁷ These base rates were supposed to be confidential, as they reflected

⁴ Ex. 3 (BOFA-VRDO-SDNY-00907795) at 3 (July 23, 2008).

⁵ Ex. 4 (CITI-VRDO-SDNY-01184859) at 5 (Sept. 24, 2015).

⁶ Ex. 5 (BARCLAYS-SDNY0124336) at -388 (Jan. 22, 2010) (Ltr. from Jim Molloy, Healthcare Group Co-Head, and James Kim, Director, to Doug Klebe, Senior Vice President/CFO, Torrance Memorial Medical Center).

⁷ See, e.g., Ex. 6 (Blankenship (Bank of America (“BOA”)) Dep.) at 148:24-149:2 (“Q. Can you tell me what you mean by ‘base rate’? Yes. A starting point.”); Ex. 7 (Luong (Barclays) Dep.) at 32:18-33:12 (“[W]e had something called a general market rate, which maybe that’s what you’re referring to as the base rate.”); Ex. 8 (Toscanini (Citi) Dep.) at 79:5-80:14 [REDACTED] Ex. 9 (Klein (Goldman Sachs (“Goldman”)) Dep.) at 117:18-118:5 [REDACTED] Ex. 10 (Morgan Stanley (“Morgan”) 30(b)(6) Dep.) at 116:14-117:15 (describing “tiering” of VRDOs); Ex. 11 (Pulling (JP Morgan (“JPM”)) Dep.) at 121:10-123:11 (explaining that the base rate “was a starting point where all the other characteristic trading values would make adjustments to that base rate based on that specific security’s trading values”); Ex. 12 (Laraia (RBC) Dep.) at 275:6-276:18 (“I guess the best way to say it is the base rate is a starting point to establish where we set other rates.”); Ex. 13 (PX

Defendants’ non-public assessment of the appropriate rate for a generic, tax-exempt VRDO.⁸ To determine rates for specific VRDOs, Defendants applied a spread against the base rate. By coordinating to inflate their “base rates,” Defendants were able to impact the rates for every VRDO in their remarketing portfolios.

B. Common Evidence Will Show that Defendants Directly Exchanged Prospective Rate Information

Defendants carried out their agreement to inflate VRDO rates through frequent communication of prospective rate information. By talking to other RMAs about whether to move the base rate up or down in any given week, RMAs were able to convey to each other how they planned to move those VRDO rates with minimal effort. Defendants primarily relied on two means to communicate about the VRDO rates they would set: (1) directly communicating prospective rate information with one another through chats, phone calls, and other means; and (2) channeling prospective rate information through the pricing service J.J. Kenny and [REDACTED]

Defendants’ antitrust policies barred their municipal trading desks from communicating with each other about where they expected to reset interest rates on the VRDOs they remarketed.

For example, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

154) (May 7, 2015) (email from Andrew Mafucci, head of Wells Fargo’s (“WF”) short-term and institutional trading, describing use of base rates).

⁸ See, e.g., Ex. 9 (Klein (Goldman) Dep.) at 115:22-116:15 [REDACTED]; Ex. 11 (Pulling (JPM) Dep.) at 121:14-121:18 (“It was the rate that we would set on a non-AMT, general market, JP Morgan-backed VRDO.”); *id.* at 273:17-23 (agreeing that JP Morgan’s base rate was not public); Ex. 14 (McCarthy (JPM) Dep.) at 33:18-35:2 (explaining that setting a base rate involves “setting a market-clearing rate” for a “typical name”).

██████████ Morgan Stanley’s Compliance Manual similarly cautioned employees to ██████████

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██████████ In her report, Dr. Abrantes-Metz explains that price-information exchanges are of particular concern because sharing such information not only facilitates coordinated behavior, it also enables co-conspirators to detect pricing deviations and thus enforce anticompetitive agreements. *See* Abrantes-Metz Rpt. ¶¶ 102-22.

Evidence common to the Class will show that, despite these policies, Defendants shared proprietary information on a near daily basis by telephone, via Bloomberg messaging technology, and through third-party intermediaries.¹² Frequently, Defendants asked one another questions about the rates a Defendant planned to set, using thinly veiled code such as, “What are you thinking for SIFMA?” and “what do you think SIFMA goes to next week?” referring to the SIFMA Municipal Swap Index, a market index composed of tax-exempt VRDOs.¹³ These discussions

⁹ Ex. 15 (PX 1661) § 24.2 (Mar. 9, 2016).

¹⁰ Ex. 16 (PX 2326) at 76 (Dec. 31, 2012).

¹¹ Ex. 17 (PX 801) at 3, 4.

¹² *See* Ex. 18 (PX 1709) & Ex. 19 (GS-VRDO-04519726) (call logs reflecting inter-Defendant phone calls from 2008-2016).

¹³ *See, e.g.*, Ex. 20 (PX 1972) (July 22, 2009) (Bloomberg message between Richard White (WF) and Kenneth Rogers (BOA)) (“what do u think for SIFMA” “THINKING 38/39”); Ex. 21 (MS-VRDO_00900395) (July 19, 2010) (Bloomberg message between Ben Langmead (Morgan

often included highly specific predictions about rates.¹⁴ For example, Bloomberg messages dated February 23, 2010, show Morgan Stanley rate setter Ben Langmead and Goldman Sachs rate setter Cynthia Klein discussing where they think SIFMA will reset, with Mr. Langmead telling Ms. Klein, “I think we’re 0.19% +/- 1bps. You?” Klein promptly agreed, noting, “DAILIES FLYING OUT THE LOW TEENS SO THAT’S ABOUT RIGHT.”¹⁵

Defendants also exchanged information about their respective VRDO inventory levels, which functioned as key indicators of where Defendants planned to reset rates.¹⁶ By sharing inventory information, Defendants could indicate what direction their base rates were going—facilitating their ability to collusively inflate rates.¹⁷ Defendants admit that they viewed information about their VRDO inventory levels as commercially sensitive, proprietary, and non-public.¹⁸ Yet, Defendants’ document productions contain numerous messages in which rate setters

and Richard White (WF)) (“what are u thinking for SIFMA next week” “Think we’re probably looking at around .29 to 0.30.” . . . “How about you, what are you thinking?” “.28/.29).

¹⁴ See *supra* n. 13.

¹⁵ Ex. 22 (PX 1843) (Feb. 23, 2010).

¹⁶ See, e.g., Ex. 8 (Toscanini (Citi) Dep.) at 27:4-28:22 (confirming that inventory was “the most important factor” when setting VRDO rates); Ex. 14 (McCarthy (JPM) Dep.) at 256:25-257:15 (explaining how rates moved in response to inventory); Ex. 23 (Langmead (Morgan) Dep.) at 112:24-113:14 (“I think all market participants knew that there was a connection between inventory and rates, the same way as other macro or microeconomic events and indicators. . . . I think it was common knowledge that that was one of the mitigating factors in resetting rates.”); Ex. 24 (White (WF) Dep.) at 95:3-9 (“[T]hat was the main factor of raising rates, was the movement of the inventories.”).

¹⁷ See, e.g., Ex. 24 (White (WF) Dep.) at 172:8-15 (“I would think he would already know that if he’s heavy and I’m heavy, that rates are going to go higher.”).

¹⁸ Ex. 25 (BOA 30(b)(6) Dep.) at 150:15-151:6 (“It would be inappropriate to share the detail of the inventory available on LMS with another market maker.”); Ex. 26 (Goldman 30(b)(6) Dep.) at 200:7-203:17 [REDACTED]

[REDACTED] Ex. 24 (White (WF) Dep.) at 167:20-24 (“Q. And that information -- information about Morgan Stanley’s inventory was proprietary to Morgan Stanley, correct? A. Correct.”).

from supposedly competing banks discussed their inventory levels with one another. Class-wide proof will show that Defendants often used terms like “heavy,” “swollen,” or “backed up” to indicate that they were carrying more VRDOs in inventory than they wanted, and “medium” or “light” to denote moderate or little inventory.¹⁹

C. Common Evidence Will Show that Defendants Used Intermediaries to Exchange Prospective Rate Information

From at least 2008 until 2012, Defendants exploited several third-party pricing indices compiled by J.J. Kenny in order to communicate about the VRDO rates they planned to set. The most important of these was the Weekly High Grade Index, which J.J. Kenny released every Monday, Tuesday, and Wednesday morning, and, when the market was volatile, also on Thursdays and Fridays.²⁰ The bulk of weekly VRDO resets occurred on Tuesdays and Wednesdays.²¹

Although J.J. Kenny marketed its High Grade Index as an innocuous average of “municipal tax-exempt notes,” common evidence will show that Defendants used the Index as a key means to effectuate their conspiracy by exchanging forward-looking base rates. [REDACTED]

¹⁹ See, e.g., Ex. 27 (PX 1957) (Feb. 10, 2010) (Bloomberg message between Ben Langmead (Morgan) and Rick White (WF)) (“how is your inventory? light /medium/ or well done??”); Ex. 28 (PX 92) (Apr. 15, 2008) (Bloomberg message between Rick White (WF) and Rob Toscanini (Citi)) (“how bad is your vrdo inventory?” “its gotten quite ugly over the past few hours”); Ex. 29 (PX 2411) (Apr. 27, 2010) (Bloomberg message between Cynthia Klein (Goldman) and Rick White (WF)) (“HOW IS YOUR INVENTORY?” “LITE-U??”); Ex. 30 (PX 2420) (June 22, 2010) (Bloomberg message between Ben Langmead (Morgan) and Cynthia Klein (Goldman)) (“You seeing tighter spreads on BBVA? Our forward weekly carry on the light side but want to be careful in pricing our European stuff.”); Ex. 31 (WF_PHIL-000855417) (Feb. 10, 2010) (Bloomberg message between Cynthia Klein (Goldman) and Rick White (WF)) (“How is your inventory?” “SWOLLEN”); Ex. 32 (PX 282) (Aug. 10, 2011 Bloomberg message between David Lo (Barclays) and Chris Dimon (Citi) discussing inventory).

²⁰ See Ex. 33 [REDACTED] Dep.) at 19:20-20:9.

²¹ See, e.g., Ex. 34 (Murphy (Barclays) Dep.) at 35:2-7; Ex. 35 (Broge (Citi) Dep.) at 111:19-23; Ex. 9 (Klein (Goldman) Dep.) at 69:20-25; Ex. 14 (McCarthy (JPM) Dep.) at 16:24-17:9; Ex. 24 (White (WF) Dep.) 50:5-50:17; see also Ex. 36 (Brewer (BOA) Dep.) at 123:6-20.

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²² Ex. 33 [REDACTED] at 156:11-14.

²⁴ Ex. 33 [REDACTED] at 159:15-23.

²⁶ *Id.* at 133:7-136:7

²⁷ *Id.* at 134:22-136:7

²⁸ See, e.g., Ex. 37 (PX 1946) (Mar. 20, 2012) (email thread where Mr. White provides “today’s rate” to [REDACTED] at 7:23 a.m. [REDACTED]).

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[REDACTED]

[REDACTED] 30 [REDACTED]

[REDACTED]

[REDACTED] 31

Seizing on this opportunity, Defendants submitted their finalized Tuesday base rates,³² enabling Defendants to use the PARS Index as an additional check on each other's private base rates.

After the LIBOR rate-manipulation scandal came to light in 2012, Defendants quietly distanced themselves from J.J. Kenny's indices, recognizing that scrutiny of their practices could, as with the LIBOR scandal, expose them to antitrust liability.³³ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 34 [REDACTED]

he set JPM's base rate at a "conservative 30" basis points after learning that the High Grade Index had come in at that rate).

³⁰ Ex. 33 [REDACTED] Dep.) at 175:6-22 & 179:21-24.

³¹ *Id.* at 141:10-142:7.

³² *See, e.g.*, Ex. 11 (Pulling (JPM) Dep.) at 146:24-147:16 (explaining that the rate JP Morgan submitted to PARS "was equivalent to the base rate after we had already set and distributed it").

³³ *See, e.g.*, Ex. 41 (Citi 30(b)(6) Dep.) at 123:7-1 [REDACTED]

Ex. 11 (Pulling (JP Morgan) Dep.) at 227:12-23 [REDACTED]

[REDACTED] Ex. 24 (White (WF) Dep.) at 219:9-14, 20-25; *id.* at 249:11-17 [REDACTED]

[REDACTED]; *see also* Ex. 42 (Joyce (Barclays) Dep.) at 94:25-94:2 [REDACTED]

³⁴ *See* Ex. 43 [REDACTED] Dep.) at 134:18-2 [REDACTED]

[REDACTED] x. 44 (PX 2603) (list of entities).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].³⁸

D. Common Evidence Will Show that Defendants Had Shared Incentives to Coordinate Rates

Common evidence will show that absent coordination, Defendants that set higher rates than their competitors would be at risk of losing their clients to those competitors. *See* Abrantes-Metz Rpt. ¶¶ 91-92. As Defendants have acknowledged, the remarketing services they offered were largely interchangeable.³⁹ If an issuer realized its RMA was setting inflated rates, there was little stopping that issuer from switching to a better performing RMA. Thus, each Defendant was incentivized to keep its VRDO rates consistent with its competitors' and to work collectively to increase all Defendants' rates in lock-step. No Defendant wanted to stick its head above the parapet.

³⁵ Ex. 43 [REDACTED] Dep.) at 45:10-14; *see also, e.g.*, Ex. 45 (GS-VRDO-03154226) (June 11, 2012) (email from Cynthia Klein (Goldman) to [REDACTED] ("Inventories beginning to pile up. . . . Weeklies probably reset in the 19-20 camp.")).

³⁶ Ex. 43 [REDACTED] Dep.) at 35:4-18, 35:25-36:14.

³⁷ *See id.* at 50:9-17.

³⁸ *See* Ex. 44 (PX 2603) [REDACTED] Ex. 46 (PX 2604) [REDACTED] [REDACTED]; Ex. 47 [REDACTED] 30(b)(6) Dep.) at 52:19-53:25 & 55:9-58:13 (explaining PX 2603 & PX 2604).

³⁹ *See, e.g.*, Ex. 35 (Broge (Citi) Dep.) at 118:7-15 ("I'm not familiar with what services other remarketing agents offer, but I would imagine they likely don't differ too much."); Ex. 48 (Shields (Morgan) Dep.) at 66:9-13 (agreeing that issuers could easily obtain remarketing services from another bank).

Common evidence will also show that Defendants also faced enormous pressure to avoid puts by investors. If Defendants could not readily remarket the bonds, Defendants took them into inventory until they could find new investors.⁴⁰ The cost of carrying VRDOs on a bank's balance sheet was typically greater than the returns from holding the bond, resulting in a negative cost of carry.⁴¹ It was thus critical for Defendants to minimize the likelihood they would end up having to carry VRDOs in inventory. [REDACTED]

ARGUMENT

A party seeking class certification must satisfy by a preponderance of the evidence the requirements of Rule 23(a)—numerosity, commonality, typicality, and adequacy of representation—and at least one subsection of Rule 23(b). *See Amgen Inc. v. Conn. Ret. Plans & Tr. Funds*, 568 U.S. 455, 460 (2013). Here, Plaintiffs seek class certification under Rule 23(b)(3), which requires plaintiffs to show: (1) “questions of law or fact common to class members predominate over any questions affecting only individual members” and (2) “a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.” Fed. R. Civ. P. 23(b). “Predominance is satisfied ‘if resolution of some of the legal or factual questions that qualify each class member’s case as a genuine controversy can be achieved through generalized proof, and if these particular issues are more substantial than the issues subject only to individualized proof.’” *Roach v. T.L. Cannon Corp.*, 778 F.3d 401, 405 (2d Cir. 2015) (quoting

⁴⁰ *See, e.g.*, Ex. 23 (Langmead (Morgan) Dep.) at 29:11-17; Ex. 12 (Laraia (RBC) Dep.) at 45:12-46:2; Ex. 24 (White (WF) Dep.) at 77:21-78:6; Ex. 49 (JPM 30(b)(6) Dep.) at 172:20-173:2.

⁴¹ *See, e.g.*, Ex. 50 (Lo (Barclays) Dep.) at 51:22-52:4 (“[T]he objective is to have no inventory whatsoever.”); Ex. 51 (Heppolette (Citi) Dep.) at 44:12-16; Ex. 26 (Goldman 30(b)(6)) Dep.) at 190:5-11.

⁴² Ex. 52 (PX 1373) (Mar. 18, 2010) (e-mail chain between JPM personnel).

Catholic Healthcare W. v. U.S. Foodservice Inc. (In re U.S. Foodservice Inc. Pricing Litig.), 729 F.3d 108, 118 (2d Cir. 2013)).

“The Second Circuit has directed district courts to interpret Rule 23 liberally, to maximize the benefits to both private parties and to the public provided by class actions.” *In re Chicago Bridge & Iron Co. N.V. Sec. Litig.*, 2020 WL 1329354, at *2 (S.D.N.Y. Mar. 23, 2020). On a motion for class certification, “a district judge ‘should not assess any aspect of the merits unrelated to a Rule 23 requirement.’” *See Ap-Fonden v. GE Co.*, 341 F.R.D. 542, 548 (S.D.N.Y. 2022) (Furman, J.) (quoting *In re Initial Pub. Offering Sec. Litig.*, 471 F.3d 24, 41 (2d Cir. 2006)). As discussed below, Plaintiffs satisfy all requirements of Rule 23 in this case. A class action is therefore “the method best suited to adjudication of the controversy fairly and efficiently.” *Amgen*, 568 U.S. at 460 (alteration and internal quotation marks omitted).

I. THE PROPOSED CLASS AND SUB-CLASS SATISFY RULE 23(A)

Numerosity (and Ascertainability). In the Second Circuit, “numerosity is presumed at a level of 40 members.” *Consol. Rail Corp. v. Town of Hyde Park*, 47 F.3d 473, 483 (2d Cir. 1995). Rule 23(a)’s numerosity requirement is easily met here, as the proposed Class consists of, conservatively, at least 734 members, *see* Schwert Rpt. ¶ 83, and the proposed Contract Sub-Class consists of, conservatively, at least 730 members, *id.* at 55 n.96. Class membership is also ascertainable because the class is defined “using objective criteria that establish a membership with definite boundaries.” *In re Petrobras Sec. Litig.*, 862 F.3d 250, 264 (2d Cir. 2017).

Commonality. The commonality requirement “simply requires that there be issues whose resolution will affect all or a significant number of the putative class members.” *Johnson v. Nextel Commc’ns Inc.*, 780 F.3d 128, 137 (2d Cir. 2015). “[E]ven a single common question will do[.]”

Wal-Mart Stores, Inc. v. Dukes, 564 U.S. 338, 359 (2011) (alterations and quotation omitted). In this case, Plaintiffs' claims present many common issues of law and fact, including:

- Did Defendants conspire to inflate VRDO rates during the Class Period?
- Did the inflation of VRDO rates impact all or virtually all class members by resulting in the obligation to pay at least one higher VRDO interest payment to bondholders?
- Did Defendants' conduct violate section 1 of the Sherman Act?
- Did Defendants' conduct deprive class members of the benefit of their RMA contracts?
- What are the appropriate measures of class-wide harm for Plaintiffs' claims?

These questions more than satisfy Rule 23(a)'s commonality requirement.

Typicality. "The typicality threshold is satisfied where the claims arise from the same conduct from which the other class members' claims and injuries arise." *Atwood v. Intercept Pharm., Inc.*, 299 F.R.D. 414, 416 (S.D.N.Y. 2014) (quoting *Casper v. Song Jinan*, 2012 WL 3865267, at *2 (S.D.N.Y. Sept. 5, 2012)). Here, the class representatives and class members all assert claims that arise from Defendants' unlawful inflation of VRDO interest rates, and their injuries flow directly from that wrongful conduct. Each of the named Plaintiffs paid interest expenses on VRDOs that had interest rates reset on a weekly or daily basis during the Class Period. Philadelphia had fourteen such VRDOs, Baltimore had four, and SANDAG had three. Am. Compl. ¶¶ 25, 26, 30. "Because the representative plaintiffs will seek to prove that they were harmed by the same overall course of conduct and in the same way as the remainder of the class, their claims are by all appearances typical of the class." *In re Air Cargo Shipping Servs. Antitrust Litig.*, 2014 WL 7882100, at *31 (E.D.N.Y. Oct. 15, 2014) (Pohorelsky, M.J.), *report and recommendation adopted*, 2015 WL 5093503 (E.D.N.Y. July 10, 2015).

Adequacy. “The adequacy requirement is satisfied where: (1) there is no conflict between the proposed lead plaintiff and the members of the class; (2) the proposed lead plaintiff has a sufficient interest in the outcome of the case to ensure vigorous advocacy; and (3) class counsel is qualified, experienced, and generally able to conduct the litigation.” *Atwood*, 299 F.R.D. at 416 (quoting *Casper*, 2012 WL 3865267, at *2). Here, no conflict exists between the class’s representatives and its members. The class representatives hold claims worth millions of dollars, assuring their vigorous advocacy, and the Court has already found that class counsel have the qualifications, experience, and ability to prosecute the claims, *see* Dkt. 97. Accordingly, the proposed class representatives and counsel adequately represent the class.

II. COMMON QUESTIONS PREDOMINATE

A. Class-Wide Evidence Is Available to Prove the Common Questions of Collusion, Impact, and Damages

1. Collusion


The abundant evidence of Defendants’ conspiracy summarized above is all common to the Class and directed to a common question of fact: Did Defendants conspire to inflate interest rates that VRDO issuers paid to investors? As the common evidence at trial will show, the answer is “Yes.” This strongly supports class certification. “As the Supreme Court has observed, the requirement of predominance is ‘readily met in certain cases alleging . . . violations of the antitrust laws.’” *In re IMAX Secs. Litig.*, 283 F.R.D. 178, 187 (S.D.N.Y. 2012) (quoting *Amchem Prods., Inc. v. Windsor*, 521 U.S. 591, 625 (1997)). Evidence showing Defendants conspired to restrain trade is “indisputably common because it focuses on the allegedly unlawful actions of the defendants, not the actions of individual plaintiffs.” *Air Cargo*, 2014 WL 7882100, at *38 (internal quotation marks omitted).

Whether Defendants violated § 1 of the Sherman Act depends on whether Defendants' conduct "stems from independent decision or from an agreement, tacit or express." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 553 (2007). As this Court explained in denying Defendants' motion to dismiss, "a horizontal agreement or conspiracy—the sort of pact alleged here—'may be inferred on the basis of conscious parallelism, when such interdependent conduct is accompanied by circumstantial evidence and plus factors.'" Dkt. 136 at 11 (quoting *Todd v. Exxon Corp.*, 275 F.3d 191, 198 (2d Cir. 2001) (Sotomayor, J.)). "Such 'plus factors may include: a common motive to conspire, evidence that shows the parallel acts were against the apparent individual economic self-interest of the alleged conspirators, and evidence of a high level of interfirm communications.'" *Id.* (quoting *Mayor & City Council of Baltimore v. Citigroup, Inc.*, 709 F.3d 129, 136 (2d Cir. 2013) (internal quotation marks omitted)). Particularly important here, "forward-looking, price-bearing communications . . . can support an inference that there was a conspiracy to fix prices." *Id.* at 16.

Plaintiffs will use evidence common to the Class to show that Defendants agreed to inflate VRDO rates, including:

- Defendants' chats and emails in which they discuss prospective VRDO rate information, including their predictions for "SIFMA" and their testimony that this reflected Defendants' view of where they expected VRDO general market rates to reset;
- Defendants' chats and emails in which they discuss proprietary information about their VRDO inventory levels and their testimony that inventory levels drove rate setting;
- Admissions by Defendants that, during the Class Period, they shared prospective VRDO rate information—including their base rates—with [REDACTED] on a near-daily basis [REDACTED]

- [REDACTED]

- 
- Expert testimony from Professor Schwert showing that the spread between the “but-for” VRDO rates and actual VRDO rates cannot be explained by non-collusive factors; and
- Expert testimony from Dr. Abrantes-Metz regarding how the remarketing services market structure facilitated agreement by Defendants, Defendants’ common incentives for colluding, and quantitative analysis showing that changes to base rates resulted in changes to final VRDO rates.

As this list makes clear, the “the nature and significance” of the common issues here is not just “more substantial” than any potential individualized issues—“they form the crux of the class claims.” *In re AXA Equitable Life Ins. Co. COI Litig.*, 2020 WL 4694172, at *14 (S.D.N.Y. Aug. 13, 2020).

2. Impact

Rule 23(b)(3) requires Plaintiffs to demonstrate that the fact of impact is “capable of proof at trial through evidence that is common to the class.” *Dial Corp. v. News Corp.*, 314 F.R.D. 108, 115 (S.D.N.Y. 2015). That standard is readily met here.

To prove impact, Plaintiffs will offer testimony and analyses from two well-respected economists. Professor Schwert is the Distinguished Professor of Finance and Statistics Emeritus at the University of Rochester and was the Managing Editor of the *Journal of Financial Economics* from 1995 until 2021, where he had an been an Editor since 1979. Schwert Rpt. ¶¶ 1-2. His research focuses on corporate finance, capital markets, and statistics. *Id.* Formerly an economist at the Federal Trade Commission, Dr. Abrantes-Metz has worked on numerous investigations into pricing manipulations and conspiracies, including the LIBOR scandal. Abrantes-Metz Rpt. ¶¶ 8-10.

Professor Schwert and Dr. Abrantes-Metz offer complementary approaches to demonstrating class-wide impact. Each expert not only offers “workable methodolog[ies] to demonstrate that antitrust injury can be proven on a class-wide basis,” they show **exactly how** the impact of Defendants’ collusion can be shown on a class-wide basis. *Dial*, 314 F.R.D. at 115; *see also In re Restasis (Cyclosporine Ophthalmic Emulsion) Antitrust Litig.*, 335 F.R.D. 1, 18 (E.D.N.Y. 2020) (evaluating expert’s impact methodology “to determine whether ‘no reasonable juror could have believed’ it,” “[o]r, as other courts have framed it . . . whether [plaintiffs] have ‘advanced a workable methodology to demonstrate that antitrust injury can be proven on a class-wide basis’” (first quoting *Tyson Foods, Inc. v. Bouaphakeo*, 577 U.S. 442, 459 (2016), then quoting *Dial*, 314 F.R.D. at 115)).

i) Professor Schwert Demonstrates Class-wide Impact

Professor Schwert offers two sophisticated regression models for measuring the class-wide impact of Defendants’ conspiracy: (1) a multiple-dummy-variable analysis; and (2) a prediction, or backcasting analysis. The results of both of these models reveal that during the Class Period, Defendants’ VRDO rates were persistently inflated above competitive levels, demonstrating that all or virtually all VRDOs had higher interest rates because of Defendants’ conspiracy, and thus all or virtually all Class members (who paid those higher rates) were injured. *See Schwert Rpt.* ¶¶ 53-57.

As Professor Schwert explains, “[a] standard approach to estimating the effect of a price-fixing conspiracy is to compare prices during a conspiratorial period to prices during a ‘benchmark’ non-conspiratorial period,” while controlling for factors unrelated to the conspiracy. *Id.* ¶ 39. Professor Schwert first identifies an appropriate non-conspiratorial period to use as a

“benchmark”: December 2015 to December 2020.⁴³ Professor Schwert then identifies two datasets: one from the conspiracy period, which is coextensive with the Class Period (running from February 2008 to November 2015), and one from the non-conspiracy, benchmark period (running from December 2015 through December 2020). The datasets include information on each VRDO’s characteristics, including, among other things, the rates set on every reset date, the “initial amount” raised by issuing the VRDO, and tax status. *Id.* ¶ 60.

Using this data, Professor Schwert conducted a **multiple-dummy-variable analysis**, consisting of separate regression models for daily and weekly VRDOs.⁴⁴ The models first control for major “explanatory” variables that could affect rates but are unrelated to Defendants’ conspiracy, such as tax status.⁴⁵ *See id.* ¶¶ 40-46, 50-52. After controlling for these variables, the models then measure how much higher VRDO rates were during the conspiracy period relative to the benchmark period. In order to generate week-by-week estimates of the conspiracy’s impact, the models include one “dummy” variable for each of the conspiracy period’s 410 weeks. *See id.* ¶¶ 63-64.

Professor Schwert’s multiple-dummy-variable analysis shows that Defendants’ conspiracy led to higher rates for all or virtually all VRDOs in the Class. Specifically, Professor Schwert finds that weekly VRDO rates were inflated in 361 of the conspiracy period’s 410 weeks and daily

⁴³ Professor Schwert begins the benchmark period in December 2015 because that is roughly when the SEC began receiving whistleblower complaints. Schwert Rpt. ¶ 48. December 2020 is the end-date for the data produced in this litigation. *See id.*

⁴⁴ Professor Schwert also includes a single-dummy-variable analysis in his report, which shows that, all else equal, rates during the conspiracy period were inflated relative to rates during the non-conspiracy period. Schwert Rpt. ¶¶ 58-62.

⁴⁵ The explanatory variables Professor Schwert controlled for include (1) the risk-free rate; (2) default risk; (3) VRDO tax status; (4) issuer state; (5) remarketing agent; (6) notional amount outstanding; (7) the VRDO’s long-term and short-term ratings; and (8) whether the VRDO was a general obligation bond. Schwert Rpt. ¶¶ 51-52.

VRDO rates were inflated in 320 of the conspiracy period's 410 weeks. *See id.* at 37 n.85, 43 n.88. This is depicted graphically in Figures 3 and 4 (weekly VRDOs) and Figures 5 and 6 (daily VRDOs). *See id.* ¶¶ 65, 66. Professor Schwert then examines the number of individual VRDOs that were reset during at least one of these weeks when rates were inflated. As shown below, Professor Schwert finds that [REDACTED] % of weekly VRDOs had at least one reset in a week where Defendants inflated weekly VRDO reset rates, and [REDACTED] % of daily VRDOs had at least one reset in a week where Defendants inflated daily VRDO reset rates. Overall, [REDACTED] % of VRDOs had at least one reset in a week where Defendants were inflating VRDO reset rates. *Id.* ¶ 69, Table 5.⁴⁶

Table 5 Summary of Number of VRDOs Injured by Conspiracy Based on Multiple Dummy-Variable Models			
Type of Reset	Number of VRDOs	Number with Injury	Percentage with Injury
Weekly	[REDACTED]		
Daily	[REDACTED]		
Total	[REDACTED]		

Courts have routinely accepted models like Professor Schwert's multiple-dummy variable analysis as proof of class-wide impact. "In antitrust cases, regression models have been widely accepted as a generally reliable econometric technique to control for the effects of the differences among class members and isolate the impact of the alleged antitrust violations on the prices paid by class members." *Olean Wholesale Grocery Coop., Inc. v. Bumble Bee Foods LLC*, 31 F.4th

⁴⁶ The *de minimis* unimpacted VRDOs had rates reset exclusively in weeks where Professor Schwert's model estimates a non-positive time-dummy coefficient, e.g., a VRDO issued in September 2015.

651, 677 (9th Cir. 2022); *In re Elec. Books Antitrust Litig.* (“E-Books”), 2014 WL 1282293, at *9 (S.D.N.Y. Mar. 28, 2014) (accepting model using the “widely-used ‘before and after’ approach”); *In re Ethylene Propylene Diene Monomer (EPDM) Antitrust Litig.*, 256 F.R.D. 82, 97, 103 (D. Conn. 2009) (in price-fixing case, certifying class where plaintiff showed impact could be demonstrated through model comparing class-period prices to “benchmark period” prices). As one court has explained, “[t]he benchmark period has been conceptually defined as ‘normal’ years against which an antitrust plaintiff compares alleged ‘conspiracy years’ to show the impact of the conspiracy.” *In re: Domestic Drywall Antitrust Litig.*, 322 F.R.D. 188, 224 (E.D. Pa. 2017). “Plugging in known prices [i.e., rates] and market factor data from the class period and running the regression equation to solve for the dummy variable allows the experts to calculate the portion of price not accounted for by the market factors.” *In re Broiler Chicken Antitrust Litig.*, 2022 WL 1720468, at *12 (N.D. Ill. May 27, 2022).

While Professor Schwert’s multiple-dummy-variable analysis alone is sufficient to show class-wide impact, Professor Schwert has further analyzed this issue by using another model as well. Professor Schwert’s **prediction, or “backcasting” analysis**, takes a slightly different approach to evaluating impact. Whereas his multiple-dummy-variable model compares conspiracy-period data to benchmark data in order to estimate the impact of Defendants’ conspiracy, Professor Schwert’s backcasting analysis draws exclusively on benchmark data. *See* Schwert Rpt. ¶ 43. Professor Schwert uses the benchmark data to estimate the relationships (“coefficients”) between VRDO rates and the major “explanatory” variables that could affect VRDO rates. Professor Schwert then predicts, or “backcasts” (since the prediction is backwards looking), what VRDO rates *would have been* during the Class Period “but for” Defendants’ conspiracy—that is, if Defendants’ conspiracy had not occurred. The difference between actual,

real-world VRDO rates and the backcast “but-for” rates provides another well-accepted economic approach for assessing the conspiracy’s impact. *See id.* ¶ 72.

Because it compares real-world transactional data with predicted but-for prices, the backcasting model allows Professor Schwert to determine impact on a per-reset basis. The results of Professor Schwert’s backcasting model show that Defendants’ conspiracy to inflate VRDO rates caused all or virtually all Class members to overpay interest rates on at least one reset. Specifically, as shown below, Professor Schwert finds that [REDACTED] % of the VRDOs in the Class had rates that were inflated above competitive levels on at least one reset date. *Id.* ¶ 74, Table 8.

Table 8 Summary of Number of VRDOs Injured by Conspiracy Based on Backcast Models			
Type of Reset	Number of VRDOs	Number with Injury	Percentage with Injury
Weekly	[REDACTED]		
Daily	[REDACTED]		
Total	[REDACTED]		

These results, therefore, provide additional, compelling proof of class-wide impact.

Courts regularly accept backcasting models at the certification stage. *See, e.g., In re Urethane Antitrust Litig.*, 768 F.3d 1245, 1260 (10th Cir. 2014) (accepting model that involved projecting a model from a “benchmark period” into a “conspiracy period” in order “to calculate the prices that would have existed but for the conspiracy”); *Broiler Chicken*, 2022 WL 1720468, at *13 (accepting model where expert used “benchmark period data” to “predict what the market price should have been during the class period”); *Hosp. Auth. of Metro. Gov’t of Nashville &*

Davidson Cnty., Tennessee v. Momenta Pharms., Inc., 333 F.R.D. 390, 410 (M.D. Tenn. 2019) (finding that plaintiff’s backcasting model “sufficiently demonstrate[d] that there is common evidence capable of demonstrating the fact of antitrust impact”). Defendants are sure to disagree with Professor Schwert’s conclusions, or the technical details of his models, but “the issue at class certification is not which expert is the most credible, or the most accurate modeler, but rather have the plaintiffs demonstrated that there is a way to prove a class-wide measure of [impact] through generalized proof.” *EPDM*, 256 F.R.D. at 100. Professor Schwert’s analyses easily satisfy this requirement.

Defendants will likely argue that impact must be determined using a “netting” approach—i.e., that harm class members suffered from inflated VRDO rates must be offset by some theoretical benefits class members gained from the conspiracy. Plaintiffs disagree that netting is relevant to this case, as decades of antitrust caselaw makes clear. *See, e.g., New York v. Hendrickson Bros., Inc.*, 840 F.2d 1065, 1079 (2d Cir. 1988) (“[A]ntitrust treble-damage actions should not be complicated by a need to trace the effects of the overcharge with respect to such matters as prices, costs, and the potentially different behavior of all the pertinent variables in the absence of the overcharges.”); *In re Namenda Indirect Purchaser Antitrust Litig.*, 338 F.R.D. 527, 557 (S.D.N.Y. 2021) (“[A]n antitrust injury occurs the moment the purchaser incurs an overcharge, whether or not that injury is later offset.” (internal quotation marks omitted)).

Courts permit “offsetting” class members’ gains from a conspiracy against their losses only in the rare circumstance where those gains “are properly associated with the collusive behavior” at issue. *E-Books*, 2014 WL 1282293, at *15-16. Here, no class member benefited from Defendants’ conspiracy to inflate VRDO interest rates. Still, Professor Schwert shows that netting can be implemented formulaically through a class-wide methodology, so even if Defendants were

somehow correct about netting, that would not bar certification. *See* Schwert Rpt. ¶ 70. Even under this more conservative impact measure, Professor Schwert demonstrates that all or virtually all VRDOs were injured by Defendants' conspiracy. *Id.* ¶¶ 71-72, 75, 84-85.

ii) Dr. Abrantes-Metz Demonstrates Class-Wide Impact

Dr. Abrantes-Metz also offers two studies that together are capable of proving, and do prove, class-wide impact: a market-structure analysis and a rate study. Dr. Abrantes-Metz's **market-structure analysis** employs a methodology regularly used by economists to identify markets likely to facilitate collusion among competitors. Abrantes-Metz Rpt. ¶ 58. The methodology involves examining qualitative evidence of (1) the alleged cartel's market power, including barriers to entry and substitute products; (2) its economic incentives; (3) the homogeneity of the products sold; (4) the relative complexity of the market's pricing structures; (5) the ability to police the cartel; and (6) the nature and extent of information sharing. *Id.* ¶¶ 59-61. This approach is consistent with antitrust guidelines adopted by the Federal Trade Commission, the Department of Justice, and the Organization of Economic Cooperation and Development. *Id.*

Based on her analysis of these factors, Dr. Abrantes-Metz concludes that Defendants' conspiracy had the power to be potent and effective, artificially elevating VRDO rates. *Id.* ¶¶ 123-30. As Dr. Abrantes-Metz explains, during the Class Period Defendants collectively controlled more than 70% of the VRDO market—a robust indicator of market power. *Id.* ¶¶ 62-66. Defendants faced little outside pressure from prospective market entrants. *Id.* ¶¶ 67-69. From an issuer (and investor) perspective, there is no substitute for VRDOs, and potential entrants into the remarketing services industry faced high barriers to entry, including access to capital, ability to offer comprehensive banking services to issuers, and considerable risk tolerance. *Id.* ¶¶ 70-72. These characteristics are strong economic evidence that Defendants could raise VRDO rates across the market. *Id.* ¶¶ 63, 124.

Dr. Abrantes-Metz further explains that Defendants’ common economic incentives, interchangeable services, simple approach to rate setting, and ability to police one another’s prices would make successful collusion more likely. *See id.* ¶¶ 73-101. In particular, Defendants’ shared economic incentives ensured that Defendants would have little reason to deviate from the conspiracy. *Id.* ¶¶ 73-92. And because Defendants understood their offerings to be homogenous, Defendants could reach consensus on rates more easily than in a heterogenous market. *Id.* ¶¶ 93-94. Defendants’ use of base rates similarly facilitated the conspiracy’s effectiveness, because Defendants could set class-wide prices by reaching agreement on a limited number of base rates. *Id.* ¶¶ 95-97. Defendants also had multiple avenues for monitoring one another’s pricing—another market characteristic likely to diminish deviations from the cartel. *See id.* ¶¶ 98-101.

Dr. Abrantes-Metz also analyzes the type of information Defendants exchanged with one another during the Class Period and the frequency and timing of such information exchanges. *See id.* ¶¶ 102-22. As Dr. Abrantes-Metz explains, Defendants frequently shared current and prospective rate and inventory information with one another. *Id.* ¶¶ 102-03. Such repeated forward-looking exchanges of competitively sensitive information are exactly the types of communications that raise antitrust concerns, particularly in a homogenous market. *Id.*

In addition to her market-structure analysis, Dr. Abrantes-Metz also conducts a **rate study** to test whether Defendants’ conspiracy would have had class-wide effects. *Id.* ¶¶ 131-88. This analysis uses regression models to study the relationship between “base rates” and interest rates class members actually paid to determine whether Defendants’ inflation of base rates would cause final rates to be inflated. *Id.* The analysis proceeds in two steps. First, Dr. Abrantes-Metz examines record evidence showing that Defendants used base rates in connection with resetting interest rates on VRDOs they remarketed, and that by adjusting their base rates, Defendants could

simultaneously change the rate applicable to every VRDO in their portfolios. *See id.* ¶¶ 135-51. Based on her qualitative analysis of this evidence, Dr. Abrantes-Metz concludes that effective coordination to inflate base rates—what Plaintiffs allege here—could lead to supra-competitive rates on all or virtually all VRDOs. *Id.* ¶ 151.

In step two of her rate study, Dr. Abrantes-Metz employs a regression model to test her conclusion that a conspiracy to inflate VRDO rates would lead to supra-competitive rates being set on all or virtually all VRDOs. *See id.* ¶¶ 152-88. Specifically, Dr. Abrantes-Metz analyzes the relationship between Wells Fargo’s base rates and its final VRDO rates, finding a nearly one-to-one correlation between the two, reflected by the .97 and .98 coefficients. *See id.* ¶¶ 161-68, Figs. 4 & 5. Dr. Abrantes-Metz also analyzes the relationship between Citi’s base rates and its final rates, finding a similarly tight correlation, shown by a .90 coefficient. *See id.* ¶¶ 169-70, Fig. 6.

Dr. Abrantes-Metz uses two approaches to expand her single-Defendant analysis to the remaining Defendants. *See id.* ¶¶ 171-88. In the first approach, Dr. Abrantes-Metz assumes that changes in remaining Defendants’ base rates were directionally aligned with Wells Fargo and Citi, and, accordingly, that data from Wells Fargo and Citi could be substituted for the absent data. Dr. Abrantes-Metz then examines the relationship between (a) Wells Fargo’s and Citi’s base rates and (b) the remaining Defendant’s final VRDO rates. *See id.* ¶¶ 172-78. In the second approach, Dr. Abrantes-Metz uses Wells Fargo data to verify that the reset rates for Wells Fargo’s general market, high-grade VRDOs were typically equal to Wells Fargo’s base rates. Dr. Abrantes-Metz then identifies the same type of VRDOs (general market, high grade) in other Defendants’ data. *Id.* ¶¶ 179-82. She uses this final rate data to construct “proxy” base rates for each Defendant. *Id.* Dr. Abrantes-Metz then examines the relationship between each remaining Defendant’s proxy

base rates and that Defendant’s final VRDO rates. *Id.* ¶¶ 183-85. Both of Dr. Abrantes-Metz’s expanded analyses show that increases (or decreases) in base rates were associated with increases (or decreases) in each Defendant’s VRDO reset rates. *Id.* Finally, Dr. Abrantes-Metz correlates each Defendants’ proxy base rate with all other Defendants’ proxy base rates and finds that the base rates moved in lock-step over the relevant period. *Id.* ¶¶ 186-88.

Like Professor Schwert’s methodologies, Dr. Abrantes-Metz’s methodologies are well-accepted approaches to proving class-wide impact. “Many courts have accepted market-structure analyses in finding predominance with respect to antitrust impact.” *In re Blood Reagents Antitrust Litig.*, 2015 WL 6123211, at *31 (E.D. Pa. Oct. 19, 2015) (collecting cases).⁴⁷ Dr. Abrantes-Metz’s report “provide[s] considerable material” explaining why the structure of the market for VRDO remarketing services was conducive to price fixing, *In re Capacitors Antitrust Litig. (No. III)*, 2018 WL 5980139, at *8 (N.D. Cal. Nov. 14, 2018), and her report presents overwhelming evidence that the market characteristics she identifies “do, in fact, exist,” *Blood Reagents*, 2015 WL 6123211, at *31.

As several courts have recognized, markets with pricing structures that involve “base” or “market” prices are often susceptible to class-wide antitrust impact. *See In re Urethane Antitrust Litig.*, 768 F.3d 1245, 1255 (10th Cir. 2014) (finding no error in district court’s conclusion that by

⁴⁷ *See also, e.g., Kleen Prod. LLC v. Int’l Paper Co.*, 831 F.3d 919, 927 (7th Cir. 2016) (expert report “show[ing] that the structure of the containerboard market was conducive to successful collusion” supported district court’s conclusion that antitrust injury could be proven on class-wide basis); *In re Linerboard Antitrust Litig.*, 305 F.3d 145, 154-55 (3d Cir. 2002) (expert’s analysis of “industry characteristics” supported conclusion that common proof was available to prove impact); *Broiler Chicken*, 2022 WL 1720468, at *13, 20 (accepting expert’s “evaluat[ion] [of] Broiler market characteristics” as common evidence of antitrust impact); *EPDM*, 256 F.R.D. at 94 (finding that expert’s market analysis “la[id] the groundwork for plaintiffs’ argument that, if collusive behavior did occur, it would have been effective in raising prices across the class, thus demonstrating class-wide injury-in-fact”).

“raising the baseline prices for all buyers,” price-fixing conspiracy “would have affected the entire market”); *In re Cardizem CD Antitrust Litig.*, 200 F.R.D. 326, 345 (E.D. Mich. 2001) (explaining that plaintiffs could prove class-wide injury by demonstrating that defendants’ collusive actions “artificially raised” the baseline for price negotiations (internal quotation marks omitted)). “The theory that underlies these decisions is, of course, that the negotiated transaction prices would have been lower if the starting point for negotiations had been list prices set in a competitive market. Hence, if a plaintiff proves that the alleged conspiracy resulted in artificially inflated list prices, a jury could reasonably conclude that each purchaser who negotiated an individual price suffered some injury.” *In re Indus. Diamonds Antitrust Litig.*, 167 F.R.D. 374, 383 (S.D.N.Y. 1996).

Courts have repeatedly found that analyses similar to the rate study conducted by Dr. Abrantes-Metz can provide common proof of class-wide impact in price-fixing cases. *See, e.g., Olean*, 31 F.4th at 671, 676 (finding no abuse of discretion in district court’s reliance on expert’s “pricing correlation test” as evidence of class-wide impact); *Broiler Chicken*, 2022 WL 1720468, at *23, 20 (accepting expert’s finding that “actual prices paid mirrored the major price indices . . . [and] prices charged by each defendant moved together over time” as class-wide proof);⁴⁸ “Even if not ultimately persuasive to a trier of fact, [such] evidence passes muster at the class certification stage.” *In re Dynamic Random Access Memory (DRAM) Antitrust Litig.*, 2006 WL 1530166, at *9 (N.D. Cal. June 5, 2006).

⁴⁸ *See also In re Cathode Ray Tube (CRT) Antitrust Litig.*, 308 F.R.D. 606, 623, 627 (N.D. Cal. 2015) (approving use of correlation analysis finding “that higher price targets were closely associated with higher actual prices” to show class-wide impact); *In re Static Random Access (SRAM) Antitrust Litig.*, 2008 WL 4447592, at *6 (N.D. Cal. Sept. 29, 2008) (finding that correlation analyses could be used to prove antitrust injury).

Accordingly, Plaintiffs will present through the testimony of Professor Schwert and Dr. Abrantes-Metz a series of rigorous economic analyses that are capable of proving class-wide impact at trial. In combination, these analyses more than suffice to meet Plaintiffs' burden.

3. Damages

Plaintiffs are also capable of quantifying class-wide damages. "Although courts must carefully evaluate estimates to ensure that the experts' methodology is a just and reasonable inference and not speculative" at the class certification stage, "damages need not usually be demonstrated with precision." *Namenda*, 338 F.R.D. at 565 (quoting *Hickory Secs. Ltd. v. Republic of Argentina*, 493 F. App'x 156, 159 (2nd Cir. 2012)). Even at the merits stage, an antitrust damages model "need not be exact." *Comcast Corp. v. Behrend*, 569 U.S. 27, 35 (2013). Because antitrust defendants' own conduct makes precise measurement difficult, "it will be enough if the evidence shows the extent of the damages as a matter of just and reasonable inference." *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 563 (1931).

i) Professor Schwert's Models Demonstrate that Plaintiffs Can Prove Damages on a Class-Wide Basis

Professor Schwert's report demonstrates "that damages are capable of measurement on a classwide basis," which is sufficient to support certification. *Iowa Pub. Emps.' Ret. Sys. v. Bank of Am. Corp.*, 2022 WL 2829880, at *23 (S.D.N.Y. June 30, 2022) (Cave, M.J.), at *24 (quoting *Comcast*, 569 U.S. at 34). Professor Schwert's models determine the difference between actual (inflated) VRDO rates and (uninflated) rates that would have been set but-for Defendants' collusion, and can be used to calculate class-wide and individual class member damages. *See* Schwert Rpt. ¶ 93.

Professor Schwert applies his models reliably and formulaically to preliminarily estimate class-wide damages. Gross damages are similar under both models—in the range of [REDACTED]

██████████ *Id.* ¶ 95 & Table 26. As Professor Schwert explains, if it were legally required (and Plaintiffs do not believe it is), his model can also “net” damages on a class-wide, objective, and formulaic basis, by including a quantum of “negative” damages associated with certain resets in the estimate of per-VRDO damages. Net damages using both the multiple-dummy variable model and the backcast model are about ██████████ *Id.* ¶ 96 & Table 27.

Professor Schwert’s model is “directly linked with [Plaintiffs’] underlying theory of classwide liability.” *Waggoner v. Barclays PLC*, 875 F.3d 79, 106 (2d Cir. 2017); *see also Roach*, 778 F.3d at 407 (explaining that *Comcast* holds only “that a model for determining classwide damages relied upon to certify a class under Rule 23(b)(3) must actually measure damages that result from the class’s asserted theory of injury”). Plaintiffs allege that Defendants conspired to set VRDO rates at supra-competitive levels. Professor Schwert’s model measures just that: the difference between the inflated rates and the rates that *would have been* set absent Defendants’ conspiracy. This approach to measuring damages is well-accepted in this Circuit and ties directly to Plaintiffs’ liability theory. *See, e.g., Hendrickson Bros.*, 840 F.2d at 1077 (“Where the antitrust violation is a price-fixing conspiracy, the measure of damages to one of the coconspirators’ customers is the difference between the prices actually paid and the prices that would have been paid absent the conspiracy”).

ii) Individualized Damages Issues Do Not Predominate

Defendants can be expected to argue that individualized issues predominate because certain class members may have attempted to hedge their VRDO exposure by entering into interest rate swap transactions in which the class member paid a fixed rate and received a floating rate. That argument fails for at least three reasons, each of which serves to highlight common questions.

First, under hornbook antitrust law, antitrust plaintiffs are entitled to the full amount of overcharge damages. That a plaintiff may have mitigated or even avoided an actual economic loss

altogether is not a defense to anticompetitive conduct. More than fifty years ago, the Supreme Court opined that “if the buyer, responding to the illegal price, maintains his own price but takes steps to increase his volume or to decrease other costs, his right to damages is not destroyed As long as the seller continues to charge the illegal price, he takes from the buyer more than the law allows.” *Hanover Shoe Inc. v. United Shoe Machinery Corp.*, 392 U.S. 481, 489 (1968). Under *Hanover Shoe*, even plaintiffs who manage to fully mitigate impact—for example, by passing overcharges on to their customers through higher prices—may nonetheless recover damages for the full amount of the overcharge. See *E-Books*, 2014 WL 1282293, at *17 (explaining that *Hanover Shoe* “rejected the monopolist’s argument that it was entitled to show that the plaintiff had passed on the overcharge to its customers and had suffered no actual loss”); *In re Polyurethane Foam Antitrust Litig.*, 314 F.R.D. 226, 239 (N.D. Ohio 2014) (collecting cases). Thus, any hedging strategies employed by Class members are irrelevant to damages.

Second, Defendants might argue that certain municipal issuers’ VRDO-plus-swap strategy should be viewed as a single transaction, which somehow operates as an escape hatch from the plain import of half a century of binding precedent. But Defendants’ “single transaction” argument is inconsistent with the evidence [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁴⁹ See, e.g., Ex. 53 [REDACTED] 30(b)(6) Dep.) at 207:23-208:13; Ex. 54 [REDACTED] 30(b)(6) Dep.) at 81:9-2.

⁵⁰ See, e.g., Ex. 53 [REDACTED] 30(b)(6) Dep.) at 117:4-23, 209:8-210:2.

⁵¹ See, e.g., *id.* at 210:3-16; Ex. 55 [REDACTED] 30(b)(6) at 141:18-143:7 [REDACTED] Ex. 56 (Ex. 3 to [REDACTED] Dep.) at 6. Indeed, Defendants have taken the position that they lack basic information about class members’ swaps, see, e.g., Ex. 57 (Nov. 30, 2021 email from Defendants representing

Third, any theoretical need to calculate damages individually would not defeat certification. In the Second Circuit, it is “well-established” that “the fact that damages may have to be ascertained on an individual basis is not sufficient to defeat class certification under Rule 23(b)(3).” *Roach*, 778 F.3d at 405 (quoting *Seijas v. Republic of Argentina*, 606 F.3d 53, 58 (2d Cir. 2010)); *see also Namenda*, 338 F.R.D. at 551 (“Typically, common issues predominate when liability is determinable on a class-wide basis, *even where class members have individualized damages.*” (emphasis in original) (internal quotation marks omitted)). “Comcast did not rewrite the standards governing individualized damages considerations: it is still ‘clear that individualized monetary claims belong in Rule 23(b)(3).’” *Sykes v. Mel S. Harris & Assocs. LLC*, 780 F.3d 70, 88 (2d Cir. 2015) (quoting *Wal-Mart*, 564 U.S. at 362). “The fact that damages may have to be ascertained on an individual basis” is simply one factor to be considered “in deciding whether issues susceptible to generalized proof ‘outweigh’ individual issues.” *Roach*, 778 F.3d at 408 (2d Cir. 2015) (quoting *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 231 (2d Cir. 2008)). In this case, the scale tips in favor of the common issues Plaintiffs have identified above.

Even if Defendants are somehow correct that class members’ swaps must be considered when calculating damages (and they are not), the number of VRDOs such swaps could possibly affect is de minimis. [REDACTED]

[REDACTED]

[REDACTED]

they “cannot be certain . . . whether a swap is tied to an underlying VRDO” and do “not maintain such data for each swap”), belying Defendants’ claim that swaps are part of the same transaction as the bonds serviced by Defendants.

⁵² The rate on a SIFMA swap is derived from the SIFMA index, an average of rates for certain weekly VRDOs. *See* <https://www.sifma.org/resources/research/about-the-municipal-swap-index/> (SIFMA-eligible VRDOs must be, among other things, “a weekly reset, effective on Wednesday” and “have the highest short-term [credit] rating”).

██████ Defendants have taken the position that LIBOR swaps are irrelevant to this case.⁵⁴ As for SIFMA swaps, Plaintiffs are not seeking damages from SIFMA manipulation, and SIFMA swaps would not perfectly offset harm from Defendants' conspiracy to inflate the VRDO rates at issue because SIFMA is only an average of certain high-grade VRDOs, including those remarketed by non-Defendants. *See Alaska Elec. Pension Fund v. Bank of Am. Corp.*, 2017 WL 404500, at *2 (S.D.N.Y. Jan. 27, 2017) (Furman, J.) (even where transactions were "entered into contemporaneously or in conjunction with" manipulated rate, such transactions "we[re] not relevant to even the most capacious understanding of the netting doctrine"). That leaves "cost-of-funds swaps." But the swaps data Defendants produced includes information for just 55 cost-of-funds swaps, reflecting merely 0.6% of the VRDOs remarketed by the six Defendants who produced such data. *See* Schwert Rpt. ¶ 106. Those 55 transactions cannot possibly overcome the numerous and weighty common issues in this case.

B. Sub-Class-Wide Evidence Is Available to Prove Defendants Breached their Remarketing Agreements

The Court should also certify the Contract Sub-Class. These sub-class members' breach-of-contract claims will rise or fall together.⁵⁵ Defendants' remarketing agreements imposed two uniform remarketing obligations on the RMAs: (1) on a VRDO's periodic reset date, to reset the VRDO's interest rate to the lowest possible rate that permitted the bond to trade at par; and (2) to use best efforts to remarket bonds that have been put back to the remarketer or tender agent, again

⁵³ Ex. 53 ████████ 30(b)(6) Dep.) at 64:6-23.

⁵⁴ *See, e.g.*, Ex. 58 (Feb. 11, 2022) (Ltr. from WF) at 1-2 (excluding LIBOR swaps from data production); Ex. 59 (Feb. 8, 2022) (Ltr. from Barclays) at 1 (same); Ex. 60 (Aug. 26, 2021) (e-mail from Citi) (same).

⁵⁵ Plaintiffs are no longer pursuing breach of fiduciary duty claims against any Defendants.

using the lowest possible rates that would permit the bonds to trade at par.⁵⁶ Defendants breached these contractual duties by failing to set rates independently and competitively, and instead coordinating among each other to set artificially high rates. Where, as here, Defendants’ contract obligations are “identical in all material respects, and Plaintiffs allege that [defendant] breached each contract through a single course of action,” certification is warranted. *AXA*, 2020 WL 4694172, at *7.

Variations in contract language will not defeat certification. So long as the contracts are “materially uniform insofar as they impose the same dut[ies],” and “plaintiffs’ contract claims will focus predominantly on common evidence” to determine whether Defendants breached the agreements, common issues predominate. *U.S. Foodservice*, 729 F.3d at 125; *see also Buffington v. Progressive Advanced Ins. Co.*, 2022 WL 3598310, at *6 (S.D.N.Y. Aug. 23, 2022) (“[C]ertification under Rule 23(b)(3) is warranted for claims that involve contracts that, like here, contain the same or *essentially the same* terms.” (emphasis added) (alteration omitted) (quoting *Fleisher v. Phoenix Life Ins. Co.*, 2013 WL 12224042, at *13 (S.D.N.Y. July 12, 2013))).

Here, Defendants’ own VRDO rate setters acknowledge that all remarketing agreements impose identical remarketing obligations on Defendants. For example, Citi rate setter Thomas Broge agreed that he “d[idn’t] need to review every agreement, because [he] kn[e]w that [his] role as a rate resetter [was] to set the rate at the lowest rate that will permit the bond to trade at par.”⁵⁷

⁵⁶ *See, e.g.*, Ex. 61 (BOFA-VRDO-SDNY-00002813) §§ 9(a), (b) (Aug. 20, 2009 Remarketing Agreement); Ex. 62 (BOFA-VRDO-SDNY-00002241) at 1, A-2 (Aug. 13, 2009 Bond Authorization for Gas Works Revenue Refunding Bonds, Eighth Series); Ex. 63 (PHL0034104) §§ 3, 3(b) (Remarketing Agreement), Ex. 64 (PHL0032118-119 and 112) at Exhibit C-2-3, § 1.04 and Exhibit B-6 (Bond Authorization for General Obligation Multi-Modal Refunding Bonds, Series 2007B); Ex. 65 (BALT_VRDO-00004931) § 1(b) (Remarketing Agreement); Ex. 66 (BALT_VRDO-00005103) at 17, 50-51 (First Supplemental Indenture for Taxable Refunding Revenue Bonds (Baltimore City Parking System Facilities), Series 2008)).

⁵⁷ Ex. 35 (Broge (Citi) Dep.) at 39:23-40:7.

In his words, “the obligation for Citi to use its best efforts to remarket tendered bonds [was] a common feature of remarketing agreements,” and he “d[idn’t] need to review every agreement to know that part of [his] job was to use best efforts to remarket tendered bonds.”⁵⁸ The record contains a host of similar testimony.⁵⁹ Barclays’ rate setter Frank Murphy explained that an RMA’s obligation to use its “judgment” “to provide the lowest possible rate that would clear the market” was standard across the industry.⁶⁰ Multiple Goldman Sachs witnesses testified that they understood themselves to have the same remarketing duties across issuers.⁶¹ And Bank of America rate setter Farah Desbas confirmed that she was unaware of any remarketing agreement that did not require the RMA to reset the rate on a best-effort basis.⁶²

It makes no difference that the contracts may implicate multiple states’ contract law. “[A]s the Second Circuit observed in affirming certification of a nationwide class, ‘state contract law defines breach consistently such that the question will usually be the same in all jurisdictions.’” *In re AXA*, 2020 WL 4694172, at *7 (quoting *U.S. FoodService*, 729 F.3d at 126-27); *see also Am. Airlines, Inc. v. Wolens*, 513 U.S. 219, 233 n.8 (1995) (“[C]ontract law is not at its core diverse, nonuniform, and confusing.”) (internal quotation marks and citation omitted); *Klay v. Humana, Inc.*, 382 F.3d 1241, 1263 (11th Cir. 2004) (“A breach is a breach is a breach, whether you are on the sunny shores of California or enjoying a sweet autumn breeze in New Jersey.”).

⁵⁸ *Id.* at 40:12-22.

⁵⁹ *See* Ex. 67 (BOA 30(b)(6) Dep.) at 118:9-119:3; Ex. 68 (DeMichiel (Citi) Dep.) at 34:2-35:20; Ex. 14 (McCarthy (JPM) Dep.) at 53:19-54:2; Ex. 10 (Morgan 30(b)(6) Dep.) at 65:3-11; Ex. 69 (Ferrentino (RBC) Dep.) at 25:8-27:5; Ex. 70 (Coursey (WF) Dep.) at 133:5-134:2; *see also infra* nn.61-63.

⁶⁰ Ex. 34 (Murphy (Barclays) Dep.) at 68:23-69:18.

⁶¹ *See* Ex. 9 (Klein (Goldman) Dep.) at 62:14-63:5; Ex. 71 (Ciraolo (Goldman) Dep.) at 21:22-22:13; Ex. 72 (Keltz (Goldman) Dep.) at 60:8-61:3.

⁶² *See* Ex. 73 (Desbas (BOA) Dep.) at 46:16-47:11.

III. DEFENDANTS' STATUTE-OF-LIMITATIONS DEFENSES CANNOT DEFEAT CERTIFICATION

To toll the statute of limitations, Plaintiffs will show that Defendants concealed their conspiracy. “Plaintiffs may prove concealment by showing either that the Defendants took affirmative steps to prevent plaintiffs’ discovery of the conspiracy, or that the conspiracy itself was inherently self-concealing.” *In re NASDAQ Mkt.-Makers Antitrust Litig.*, 169 F.R.D. 493, 520 (S.D.N.Y. 1996). Because the concealment inquiry focuses on Defendants’ conduct, courts have “overwhelmingly held that . . . the common question of whether Defendants successfully concealed the existence of the alleged conspiracy predominates over any individual questions regarding the knowledge or diligence of individual plaintiffs.” *Id.* at 521; *see also Indus. Diamonds*, 167 F.R.D. at 385 (explaining that of although “[t]he issues of each putative class member’s lack of knowledge and due diligence may require individualized consideration,” “the majority of courts that have considered this issue have held that these individual issues do not preclude the certification of a class”).

Here, Defendants’ “conspiracy was inherently self-concealing, for by its very nature, the conspiracy could not succeed unless kept a secret.” *Sonterra Cap. Master Fund Ltd. v. Credit Suisse Grp. AG*, 277 F. Supp. 3d 521, 567 (S.D.N.Y. 2017). Had Defendants publicly disclosed that they were conspiring to inflate VRDO rates, their conspiracy could not have continued. Moreover, issuers were not present on the trading floor, and could not have known precisely how RMAs were selecting VRDO rates. [REDACTED]

[REDACTED].⁶³ So long as rates were inflated

⁶³ *See, e.g., Ex. 55* [REDACTED] 30(b)(6) Dep.) at 110:6-15 [REDACTED]
[REDACTED].

across the board, issuers had no basis to complain—all but guaranteeing that issuers could not uncover Defendants’ conspiracy. As Citi manager John Heppolette explained, “A tight distribution would refute the allegation that we are cheap to competitors.”⁶⁴ This is sufficient to show concealment. *See U.S. Foodservice*, 729 F.3d at 128 (fraudulent concealment issues failed to defeat predominance where common evidence showed defendant “intended to conceal” the truth and defendants failed to show that plaintiffs had the “necessary tools to uncover the fraud”).

Although not required to do so, Plaintiffs can also show, using class-wide proof, that Defendants took affirmative steps to conceal their conspiracy. Throughout the Class Period, Defendants uniformly (and falsely) messaged to class members that they were competing with one another to set the lowest rates.⁶⁵ Defendants never disclosed that they were sharing information about prospective rates and inventory levels and using that information to set inflated rates on the VRDOs they remarketed. On the contrary, Defendants outwardly claimed to be competing to set the lowest possible rates, and to this day, still disclaim the existence or knowledge of the conspiracy.⁶⁶

Glossing over years of concealment, Defendants apparently plan to argue that Plaintiffs should have been able to observe that VRDO rates were inflated, triggering a duty to investigate Defendants’ conduct. Defendants cannot explain how Plaintiffs could possibly have recognized that VRDO rates had been inflated “based on the bare fact of their publication, any more than any other consumer . . . would recognize artificially fixed prices.” *Sullivan v. Barclays PLC*, 2017 WL 685570, at *27 (S.D.N.Y. Feb. 21, 2017). Nor can Defendants explain how any potential awareness

⁶⁴ Ex. 51 (Heppolette (Citi) Dep.) at 68:23-69:4.

⁶⁵ *See supra* at 4-5.

⁶⁶ Ex. 36 (Brewer (BOA) Dep.) at 143:11-144:9; Ex. 74 (Hamel (RBC) Dep.) at 90:10-23.

of J.J. Kenny’s indices could have put them on inquiry notice. In fact, no Defendant has asserted a specific accrual date, despite having the burden to do so.⁶⁷

Defendants have also suggested that certain *qui tam* lawsuits related to VRDOs gave class representatives actual notice of, or at least triggered a duty to investigate, Defendants’ misconduct alleged in this case. But whether these *qui tam* suits put reasonable issuers on notice of their claims is a common question, as explained above. As to actual notice, Defendants have failed to establish that any class members were aware of *qui tam* suits alleging the misconduct at issue here, and so those suits hardly could have triggered the limitations period. *See* Dkt. 312 at 22 (finding “[t]he lack of allegations in the [2014 California *qui tam* complaint] regarding the central claims in the Amended Complaint here” “fatal to Defendants’ argument” that San Diego had constructive notice of its claims against Defendants). “[A]ny individual questions concerning each putative class member’s lack of knowledge and due diligence may be considered, if necessary, when the court addresses each putative class member’s damage claim.” *Indus. Diamonds*, 167 F.R.D. 374, 385 (S.D.N.Y. 1996); *see also Linerboard*, 305 F.3d at 163 (“[A]ny individualized facts of fraudulent concealment may be adjudicated in the same fashion and at the same time as individual damages issues.”).

In any case, while affirmative defenses exist in nearly every class action, courts have been reluctant to deny class action status under Rule 23(b)(3) simply because affirmative defenses may be available against individual members. *See* 2 Newberg and Rubenstein on Class Actions § 4:57 (6th ed. 2022) (“Statute of limitations defenses—like damage calculations, affirmative defenses,

⁶⁷ *See, e.g.,* Ex. 75 (RBC’s Resp. to Baltimore’s Interrog. No. 18) (stating only that Plaintiffs should have been on notice of their claims “contemporaneously to the suffering of the alleged harm and prior to any applicable limitations period”). Goldman Sachs has vaguely asserted accrual “in or before February 2008.” Ex. 76 (Goldman’s Resp. to Philadelphia’s Interrog. No. 18).

and counterclaims—rarely defeat class certification.”). It is black-letter law in the Second Circuit that “although ‘a defense may arise and may affect different class members differently, this occurrence does not compel a finding that individual issues predominate over common ones.’” *In re Nassau Cnty. Strip Search Cases*, 461 F.3d 219, 225 (2d Cir. 2006) (quoting *In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 138 (2d Cir. 2001) (alteration omitted)).

IV. Class Treatment Is a Superior Method to Resolve the Disputes

Certification under Rule 23(b)(3) requires a finding that “a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.” Fed. R. Civ. P. 23(b)(3). That standard is easily met here, as “substituting a single class action for numerous trials in a matter involving substantial common legal issues and factual issues susceptible to generalized proof will achieve significant economies of time, effort and expense, and promote uniformity of decision.” *U.S. Foodservice*, 729 F.3d at 130 (internal quotation marks omitted).

CONCLUSION

As set forth above, Plaintiffs can prove all aspects of their claims on a class-wide basis using common proof. The Court should, therefore, certify the Class and the Contract Sub-Class, both as defined this memorandum, and appoint Quinn Emanuel Urquhart & Sullivan, LLP, Wollmuth Maher & Deutsch LLP, and Susman Godfrey LLP as Co-lead Class and Sub-Class Counsel pursuant to Rule 23(g).

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QUINN EMANUEL URQUHART &
SULLIVAN, LLP

By: /s/ Daniel L. Brockett

Daniel L. Brockett
Steig D. Olson
Sami H. Rashid
Thomas Lepri
51 Madison Avenue, 22nd Floor
New York, New York 10010
Telephone: (212) 849-7000
Fax: (212) 849-7100
danbrockett@quinnemanuel.com
steigolson@quinnemanuel.com
samirashid@quinnemanuel.com
thomaslepri@quinnemanuel.com

Jeremy D. Andersen
865 South Figueroa Street, 10th Floor
Los Angeles, California 90017
Telephone: (213) 443-3000
Fax: (213) 443-3100
jeremyandersen@quinnemanuel.com

Co-Lead Interim Class Counsel

WOLLMUTH MAHER & DEUTSCH LLP

By: /s/ David H. Wollmuth

David H. Wollmuth
William A. Maher
Ronald J. Aranoff
Randall Rainer
500 Fifth Avenue
New York, New York 10100
Telephone: (212) 382-3300
dwollmuth@wmd-law.com
wmaher@wmd-law.com
raranoff@wmd-law.com
rrainer@wmd-law.com

Co-Lead Interim Class Counsel

SUSMAN GODFREY LLP

By: /s/ William C. Carmody

William Christopher Carmody

Arun Subramanian

Seth Ard

Tamar Lusztig

Elizabeth Aronson

1301 Avenue of the Americas, 32nd Fl.

New York, New York 10019

Telephone: (212) 336-8330

Fax: (212) 336-8340

bcarmody@susmangodfrey.com

asubramanian@susmangodfrey.com

sard@susmangodfrey.com

tlusztig@susmangodfrey.com

baronson@susmangodfrey.com

Katherine M. Peaslee

401 Union Street, Suite 3000

Seattle, Washington 98101

Telephone: (206) 516-3880

Fax: (206) 516-3883

kpeaslee@susmangodfrey.com

Co-Lead Interim Class Counsel

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing was served on all parties through their counsel of record via the Court's CM/ECF system, on October 27, 2022.

/s/ *Elizabeth Aronson*
Elizabeth Aronson